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TWO NEW GENERA AND THIRTEEN NEW SPECIES
OF AUSTRALIAN THYSANOPTERA.

BY J. DOUGLAS HOOD.

The sixth volume of the *Memoirs of the Queensland Museum*, issued December 19, 1918, contains an article by the writer in which are described four new genera and twenty-four new species of Thysanoptera collected by Mr. Alexandre A. Girault in North Queensland, Australia. The present paper is supplementary to the one referred to and, together with a brief article in the *Bulletin of the Brooklyn Entomological Society*, Volume XIII, No. 4, published in October, 1918, completes the description of the new Thysanoptera which have come gradually into the writer's possession through Mr. Girault's efforts. Five of the following new species are from Brooklyn, New South Wales; the remainder are from Queensland. All holotypes and allotypes are in the writer's collection and one set of paratypes will be deposited in the Queensland Museum.

Scirtothrips australiæ, sp. nov.

Female (macropterous).—Length about 0.8 mm. Color straw yellow (nearly white); abdominal segments 3-7 each with a basal transverse dark line extending entirely across segment; segment 1 of antenna colorless, segment 2 grayish apically, 3-8 nearly uniform light gray, 4 and 5 each with a narrow, dark ring at base; fore wings nearly uniform light gray, hind wings pale, with dark median line.

Head about 1.5 times as wide as long and about 0.9 as long as prothorax; cheeks nearly straight, subparallel; frontal costa about 0.8 as wide as basal antennal segment. Eyes slightly protruding, about four times as long as their distance from posterior margin of head, 0.8 as wide as their interval, setose. Ocelli approximate, opposite center of eyes, pigment dirty yellow. Antennæ about 2.45 times as long as head, normal to the genus.

Prothorax about 1.62 times as wide as long; pronotum with minute, close, transverse striæ visible only under high magnification and a few scattered dark bristles, the pair at the posterior angles long, stout, and dark, about 1.6 times as long as width of segment 2 of antenna. Pterothorax about 1.23 times as wide as prothorax. Wings of fore pair about ten times as long as greatest subbasal width exclusive of scale, 2.45 times as long as antennæ, and nearly four times as long as width of head; anterior vein with a group of three dark bristles in basal fourth, a group of two in second fourth, one bristle at middle, and two more near tip; posterior vein with one bristle in apical half.

Abdomen with last segment about 1.3 times as long as wide, not divided above; bristles very light brown, normal to the genus.

Measurements of holotype ♀: Length 0.756 mm.; head, length 0.086 mm., width 0.130 mm.; eyes, length 0.060 mm., width 0.041 mm.; prothorax, length 0.096 mm., width 0.156 mm.; pterothorax, width 0.192 mm.; abdomen, width 0.211 mm.; fore wings, length 0.516 mm., width at middle 0.031 mm., near base 0.051 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	18	34	38	33	36	37	5	10
Width (μ)	21	23	17	17	15	15	7	5
Total length of antenna, 0.211 mm.								

Described from one female taken by A. A. Girault at Pentland, Queensland, Australia, January 6, 1913, by sweeping foliage and grass.

The abdominal markings are distinctive.

Anaphothrips speciosus sp. nov.

Female (macropterous).—Length about 1 mm. Color dark blackish brown with abdominal segments 3–5 abruptly pale yellow; legs yellow, with femora shaded on outer surface with dark blackish brown; antennal segments 1, 2, and 5–8 slightly lighter than head; segments 3 and 4 yellowish, the latter slightly darker apically; fore wings nearly clear, with a brown transverse band occupying second fifth; hind wings with brown median vein.

Head about 1.08 times as wide as long, about equal in length to prothorax, narrowest at base and widest across eyes, cheeks evenly arched; vertex convex and rounded; occiput with four or five transverse anastomosing lines; all bristles minute, subequal in length to diameter of ocelli. Posterior ocelli situated just behind middle of eyes and forming a nearly right angle with the anterior ocellus, which is slightly smaller. Eyes half as long as head, prominent, protruding, and about two-thirds as wide as their interval. Antennæ nearly 1.9 times as long as head, eight-segmented, segment 6 not divided by a subapical suture; segment 3 with a forked trichome on dorsal surface, segment 4 with a similar one on ventral surface. Mouth cone reaching three-fourths across prosternum; maxillary palpi three-segmented.

Prothorax about one and one-fourth times as wide as long and about equal in length to head; surface smooth, and with a few minute bristles; no

long bristles at posterior angles. Mesothorax about 1.36 times as wide as prothorax and much wider than metathorax. Wings of fore pair with two longitudinal veins reaching nearly to tip; anterior vein with three pale bristles near base, four in the transverse brown band which occupies the second fifth of the wing, and three or four widely separated ones beyond; posterior vein with about eight bristles, which are more widely separated toward apex of wing.

Abdomen slender but distinctly wider than mesothorax, and sharply conical, the last three segments successively shorter; posterior margin of segment 8 pectinate; segment 10 divided above; bristles on 9 and 10 long, dark in color, and prominent.

Measurements of holotype (♀): Length 1.03 mm.; head, length 0.122 mm., greatest width 0.132 mm., least width 0.119 mm.; eyes, length 0.063 mm., width 0.036 mm., interval 0.056 mm.; prothorax, length 0.121 mm., width 0.154 mm.; pterothorax, length 0.216 mm., width 0.209 mm.; fore wings, length 0.648 mm., width at middle 0.047 mm., near base 0.066 mm.; abdomen, greatest width 0.240 mm.; segment 8, length 0.078 mm.; segment 9, length 0.071 mm.; segment 10, length 0.060 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	21	33	39	34	34	46	10	14
Width (μ)	26	24	18	18	17	18	7	5
Total length of antenna, 0.231 mm								

Described from one female taken by sweeping grass in a yard at Brooklyn, New South Wales, November 7–18, 1914, by A. A. Girault.

The yellow abdominal band occupying the third, fourth, and fifth segments and the dark prothorax enable this species to be distinguished at once from closely allied forms.

Haplothrips angustus, sp. nov.

Female (macropterous).—Length about 1.4 mm. Color blackish brown with inner surface of fore tibiae, and all tarsi, yellow, lightly shaded with brown; antennal segments 1, 2, and 5–8 dark blackish brown and concolorous with body, 3 light yellowish brown, 4 intermediate in color between 3 and 5, paler basally; wings clear, except the scale and the region of the three subbasal bristles, which are brown.

Head about 1.25 times as long as wide, sides distinctly arcuate and converging to base, which is about 0.85 the width behind eyes; surface faintly subreticulate and with a few minute spines; vertex swollen but not produced, the anterior ocellus slightly overhanging and nearly attaining front margin of eyes; postocular bristles blunt, one-seventh as long as head. Eyes 0.38 as long as head and two-thirds as wide as their interval. Antennae of normal structure; segment 3 fully twice as long as wide, and without a sense cone on inner surface; segment 4 large; 8 conical and closely united at base to 7. Mouth cone reaching less than half way across prosternum, broadly rounded at apex.

Prothorax narrow, two-thirds as long as head and (inclusive of coxae)

about 1.8 times as wide as long, surface smooth, median line faintly indicated; all bristles present, blunt, the anterior marginals shortest, the posterior laterals longest, others subequal to postoculars. Wings of fore pair slender, narrowed at middle, and with seven (rarely, six) interlocated hairs on posterior margin near apex. Fore tarsus with a minute tooth.

Abdomen about equal in width to pterothorax. Tube 0.55 as long as head, twice as long as basal width, and less than twice as wide at base as at apex. Bristles largely blunt; terminal bristles shorter than tube.

Measurements of holotype (♀): Length 1.39 mm.; head, length 0.209 mm., greatest width 0.166 mm., width at base 0.141 mm.; eyes, length 0.080 mm., width 0.045 mm., interval 0.066 mm.; postocular bristles, length 0.030 mm.; prothorax, length 0.138 mm., width (inclusive of coxæ) 0.257 mm.; pterothorax, length 0.312 mm., width 0.292 mm.; abdomen, greatest width 0.286 mm.; tube, length 0.115 mm., width at base 0.057 mm., at apex 0.032 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	33	44	49	51	44	40	38	26
Width (μ)	32	27	23	30	26	22	19	13
Total length of antenna, 0.325 mm.								

Male (macropterous).—Length about 1.3 mm. Color and structure essentially as in female, except as follows: Head about 1.34 times as long as wide, 0.89 as wide at base as behind eyes. Eyes 0.35 as long as head and three-fourths as wide as their interval. Prothorax 0.77 as long as head and (inclusive of coxæ), 1.7 times as wide as long, median line distinctly indicated, black. Fore legs swollen, tarsi with a stout triangular tooth.

Measurements of allotype (♂): Length 1.26 mm.; head, length 0.209 mm., greatest width 0.156 mm., width at base 0.139 mm.; eyes, length 0.074 mm., width 0.045 mm., interval 0.062 mm.; postocular bristles, length 0.033 mm.; prothorax, length 0.161 mm., width (inclusive of coxæ) 0.276 mm.; pterothorax, length 0.294 mm., width 0.281 mm.; abdomen, greatest width 0.276 mm.; tube, length 0.114 mm., width at base 0.056 mm., at apex 0.031 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	31	42	49	50	44	40	37	26
Width (μ)	32	26	23	28	24	22	18	13
Total length of antenna, 0.319 mm.								

Described from three females and one male taken by sweeping grass, at Brooklyn, New South Wales, Nov. 7–18, 1914, by A. A. Girault.

Easily known from the other Australian species of the genus by the long third antennal segment which has no sense cone on its inner surface, and by the antennal coloration.

***Zygothrips pallescens*, sp. nov.**

Female (macropterous).—Length about 1.5 mm. Color brownish yellow, with metathorax, first abdominal segment, all tarsi, apical half of tibiae, and antennal segments 3–6, pale yellow; tube dark brown, paler apically.

Head about 1.5 times as long as wide, broadest midway between eyes and base, cheeks nearly parallel but converging very slightly to eyes and more rapidly to base of head; dorsal and lateral surfaces without sculpture, set with a few minute spines; vertex slightly produced, overhanging, and bearing the anterior ocellus at its extremity, which slightly surpasses the anterior margin of eyes; postocular bristles less than half as long as eyes, conically expanded at tip. Eyes nearly one-third as long as head, not protruding. Anterior ocellus directed forward, posterior ocelli just in advance of a line drawn through middle of eyes. Antennæ about 1.6 times as long as head; segments 7 and 8 scarcely compactly united; sense cones short and slender; formula: 3, 0-1; 4, 2-2; 5, 1-1+1; 6, 1-0+1; 7 with one on dorsum near apex; segments 1 and 2 brown, darker than head, 2 paler toward apex; 3-6 pale yellow; 7 and 8 brownish yellow, paler than 1 and 2. Mouth cone blunt, much shorter than width of head, reaching about two-thirds across prosternum; labrum about attaining tip of labium.

Prothorax slightly more than half as long as head and (inclusive of coxæ) about twice as wide as long; surface smooth; no median thickening; all usual bristles present, conically expanded at tip, the two pairs at the posterior angles subequal in length to postoculars, the others and the coxal shorter and of nearly equal length. Pterothorax distinctly wider than prothorax, sides converging posteriorly. Legs moderately long, fore femora not swollen, fore tarsi unarmed. Wings clear, slightly narrowed at middle, without accessory hairs on posterior margin; subbasal bristles capitate, the outer one longest and subequal to postocular.

Abdomen normal; bristles largely capitate, all three pairs on segment 9 expanded at apex and two-thirds as long as tube, the terminal bristles equal in length to tube. Tube somewhat more than half as long as head, twice as long as basal width, and nearly twice as wide at base as at apex.

Measurements of holotype (♀): Length 1.52 mm.; head, length 0.240 mm., greatest width 0.161 mm., least width 0.144 mm.; eyes, length 0.076 mm., width 0.045 mm., interval 0.062 mm.; postocular bristles, length 0.033 mm.; prothorax, length 0.126 mm., width (inclusive of coxæ) 0.258 mm.; pterothorax, length 0.348 mm., width 0.300 mm.; abdomen, greatest width 0.294 mm.; tube, length 0.128 mm., width at base 0.064 mm., at apex 0.034 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	36	51	56	62	56	50	44	28
Width (μ)	35	28	28	30	26	24	22	12

Total length of antenna, 0.383 mm.

Described from two macropterous females taken by sweeping in a forest, at Ayr, North Queensland, November 6, 1912, by A. A. Girault.

The coloration and unarmed fore tarsi are distinctive.

Zygothrips inermis, sp. nov.

Female (macropterous).—Length about 1.4 mm. Color dark brown, with tarsi yellow and the apical portions of tibiae and the third antennal segment brownish yellow; tube paler at base and in apical third.

Head about 1.3 times as long as wide, broadest at basal third, thence gradually narrowing to eyes and to base; vertex not produced nor overhanging; postocular bristles nearly as long as eyes, capitate. Eyes about one-fourth as long as head, not protruding. Anterior ocellus directed forward and upward, not overhanging; posterior ocelli slightly in front of a line drawn through middle of eyes. Antennæ about 1.7 times as long as head; segments 7 and 8 closely but not compactly united; sense cones short and slender; formula: 3, 1-1; 4, 2-2; 5, 1-1+1; 6, 1-0+1; 7 with one on dorsum near apex; segments 1, 2 and 5-8 concolorous with head, except 2 which is lighter toward apex; 3 much lighter, darker at apex than at base; 4 slightly lighter than 5 but distinctly darker than 3. Mouth cone blunt, much shorter than width of head, reaching about to middle of prosternum; labrum about attaining tip of labium.

Prothorax three-fourths as long as head and (inclusive of coxæ) nearly twice as wide as long; surface smooth; median thickening distinct; anterior marginal bristles minute, others (including coxal) conically expanded at tip and subequal to postoculars. Pterothorax slightly narrower than prothorax, sides converging posteriorly. Legs moderately short, fore femora moderately stout, fore tarsus unarmed. Wings slightly narrowed near middle; subbasal bristles on fore wings conically expanded at tip, slightly shorter than postoculars.

Abdomen normal; bristles largely capitate, the two lateral pairs on segment 9 pointed and much longer than tube, the dorsal pair capitate and shorter than tube, the terminal bristles fully twice as long as tube. Tube slightly less than 0.6 as long as head, nearly twice as long as basal width, and not quite twice as broad at base as at apex.

Measurements of holotype (♀): Length 1.36 mm.; head, length 0.196 mm., greatest width 0.149 mm.; eyes, length 0.054 mm., width 0.037 mm., interval 0.057 mm.; postocular bristles, length 0.050 mm.; prothorax, length 0.145 mm., width (inclusive of coxæ) 0.282 mm.; pterothorax, width 0.270 mm.; abdomen, greatest width 0.313 mm.; tube, length 0.110 mm., width at base 0.060 mm., at apex 0.033 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	37	47	45	49	42	39	42	28
Width (μ)	32	29	27	27	24	22	19	13
Total length of antenna, 0.329 mm.								

Described from one macropterous female taken by sweeping grass in a forest, at Aloomba, North Queensland, July 7, 1912, by A. A. Girault.

Distinguished from all other members of its genus by the unarmed fore tarsi and the unusually long bristles at the tip of the tube.

Zygothrips cingulatus, sp. nov.

Female (macropterous).—Length about 1.2 mm. Head, thorax, last three abdominal segments, the two basal and two apical antennal segments, and most of fore and mid femora, dark brown; remaining segments of abdomen, all of hind legs, fore and mid tibiæ and tarsi, apices of fore and mid femora, and antennal segments 3-6 pale yellow; wings colorless.

Head about 1.38 times as long as wide, broadest at basal third, sides converging roundly to eyes and to base of head, narrowest at posterior angle of eyes; extreme base of head and cheeks with a few faint anastomosing lines and a few minute colorless spines; vertex arched and forming a low ridge extending forward between basal segments of antennæ, not overhanging; postocular bristles about 0.8 as long as eyes, expanded at tip. Eyes about one-third the length of head, distinctly protruding posteriorly. Anterior ocellus directed forward and upward, not overhanging; posterior ocelli just in advance of a line drawn through middle of eyes. Antennæ about 1.9 times as long as head; segments 7 and 8 not closely united; sense cones slender; formula: 3, 1-1; 4, 1-2; 5, 1-1+1; 6, 1-1+1; 7 with one on dorsum near apex; segments 1 and 2 brown, concolorous with head, 2 paler at apex; 3-6 pale yellow, almost colorless, 6 slightly infusate; 7 and 8 brown, lighter than head. Mouth cone blunt, much shorter than width of head, reaching about two-thirds across prosternum; labrum constricted before apex, about attaining tip of labium.

Prothorax about 0.6 as long as head and (inclusive of coxæ) about twice as wide as long; surface smooth, no median thickening; all usual bristles present, expanded at tip, the two pairs at the posterior angles equal to postoculars, the others and coxal half as long. Pterothorax about equal in width to prothorax, sides roundly converging in posterior half. Legs moderately short, fore femora not at all swollen, fore tarsi unarmed. Wings clear, very weak and slender, slightly narrowed at middle, hind margin without accessory hairs; subbasal bristles capitate, the outer one longest and subequal to postocular.

Abdomen normal; bristles largely capitate, all three pairs on segment 9 pointed and subequal in length to tube, the terminal bristles distinctly longer than tube. Tube about two-thirds as long as head, slightly more than twice as long as basal width, and nearly twice as wide at base as at apex.

Measurements of holotype (♀): Length 1.19 mm.; head, length 0.174 mm., greatest width 0.126 mm., least width 0.115 mm.; eyes, length 0.060 mm.; width 0.036 mm., interval 0.045 mm.; postocular bristles, length 0.050 mm.; prothorax, length 0.103 mm., width (inclusive of coxæ) 0.208 mm.; pterothorax, length 0.240 mm., width 0.204 mm.; abdomen, greatest width 0.211 mm.; tube, length 0.112 mm., width at base 0.051 mm., at apex 0.027 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	33	43	42	47	46	45	40	34
Width (μ)	32	42	24	26	23	21	19	11
Total length of antenna, 0.330 mm.								

Described from two females, both taken by sweeping in forest at Nelson, North Queensland, by A. A. Girault. One was collected July 7, 1912, and the other December 4, 1913.

Distinguished by the coloration and the unarmed fore tarsi.

Podothrips xanthopus, sp. nov.

Female (macropterous).—Length about 1.5 mm. Surface shining. Color dark blackish brown, with apex of fore femora, all tibiae and tarsi, abdominal segments 1-4, and antennae beyond basal half of segment 2, yellow; segment 8 of antennae shaded with gray; abdominal segments 5 and 6 yellowish brown, and, together with 3 and 4, each with a dark brown spot on dorsal surface near base; wings of both pairs light gray.

Head about 1.5 times as long as wide, broadest slightly behind eyes, thence narrowing roundly and abruptly to base, where there is a slight neck-like constriction; vertex rounded and evenly declivous; dorsal surface without sculpture; cheeks smooth, sparsely and briefly spinose; postocular bristles knobbed, half as long as eyes, situated close to lateral margins of head. Eyes one-third as long as head and a little more than half as wide as their interval, not protruding, ventral extent less than dorsal. Ocelli anterior in position, the median one situated anterior to front margin of eyes and between basal segments of antennæ, the posterior pair situated about half their diameter in front of a line drawn through middle of eyes. Antennæ of normal form, nearly 1.5 times as long as head; sense cones and bristles short and weak. Mouth cone blunt, broadly rounded, much shorter than its width at base.

Prothorax three-fourths as long as head and (inclusive of coxæ) twice as wide near base as at apex and two-thirds as long as wide; lateral outline distinctly concave; surface smooth; median dorsal line chitinized for about one-third its length; all usual bristles present, the anterior marginal and mid-lateral pairs pointed, visible only under the highest magnifications; the two pairs near the posterior angles and the coxal pair knobbed, subequal to postoculars; anterior angulars similarly knobbed, but only half as long. Pterothorax much narrower than prothorax, sides nearly straight and very slightly converging posteriorly. Legs rather short and stout; fore femur much shorter than and only half as wide as head; fore tibia with a small, blunt, setose tooth on inner surface of apex; fore tarsus with a slender, acute, curved tooth about half as long as width of tarsus, the inner surface of tooth with a bristle arising from near middle. Wings slender, weak, without double subapical fringe.

Abdomen slender, about as wide as prothorax. Tube about 0.5 as long as head, basal fourth slightly swollen and twice as wide as apex; bristles pale, mostly knobbed.

Measurements of holotype (♀): Length 1.5 mm.; head, length 0.228 mm., greatest width 0.156 mm., least width 0.118 mm.; eyes, length 0.072 mm., width 0.039 mm., interval 0.069 mm.; postocular bristles, length 0.036 mm.; prothorax, length 0.172 mm., width (inclusive of coxæ) 0.259 mm.; pterothorax, length 0.288 mm., width 0.228 mm.; abdomen, greatest width 0.252 mm.; tube, length 0.120 mm., width at base 0.056 mm., at apex 0.029 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	35	47	45	48	43	43	46	30
Width (μ)	34	28	26	28	25	22	19	11

Total length of antenna, 0.337 mm.

Described from a unique female collected by A. A. Girault at Nelson, North Queensland, April 12, 1914, by sweeping in forest.

Easily known by the coloration and the absence of an acute lateral tooth on cheeks behind eyes.

Genus *Asemothrips*, nov.

(ἄσθημος, without device; θρίψ, a wood worm.)

Head much longer than wide. Eyes moderate in size, rounded. Antennæ eight-segmented, the last two segments compactly joined, separated only by an oblique suture; fifth segment obliquely truncate at outer surface of apex. Mouth cone short and broadly rounded at apex, the labrum scarcely surpassing labium and with sides straight. Prothorax shorter than head. Fore femora swollen and fore tarsi strongly armed in both sexes. Wings of nearly equal width throughout, not narrowed at middle. Bristles short and knobbed in the type species.

Genotype: *Asemothrips picturatus*, sp. nov.

The type of the present genus is a species of ordinary appearance but one which I have found impossible to assign to any existing genus on account of the union of the seventh and eighth antennal segments, the obliquely truncate apex of the fifth antennal segment, and the short broadly rounded mouth cone. Notwithstanding the form of the wings, which are scarcely narrowed at the middle, the insect is apparently referable to the *Haplothrips* group.

Asemothrips picturatus, sp. nov.

Male (macropterous).—Length about 1.5 mm. Color light yellow, with first two segments of antennæ, frons, a longitudinal stripe behind each eye, lateral and dorsal pterothoracic plates, sides of first abdominal segment, all of ninth abdominal segment, and tube, abruptly dark brown, the post-ocular stripe and middle of tube darkest; antennæ with apex of segment 5, apical two-fifths of segment 6, and all of segments 7 and 8, light brown; fore femora shaded with brown on outer surface, middle and hind tibiæ brown basally, second abdominal segment slightly darkened at anterior angles; wings clear.

Head about 1.6 times as long as wide, dorsal and lateral surfaces nearly smooth and with a few minute spines; cheeks converging roundly to eyes and more gradually to near base of head, thence subparallel; vertex produced to form a slight hump, and with anterior margin nearly vertical; postocular bristles short, less than half as long as eyes, knobbed, and situated close to sides of head. Eyes about one-third as long as head, prominent and slightly protruding, nearly as wide as their interval. Anterior ocellus directed forward and somewhat overhanging; posterior ocelli situated in front of a line drawn through middle of eyes. Antennæ about 1.55 times as long as head; segment 5 prominently obliquely truncate on outer surface of apex; segment 6 with the pedicel correspondingly truncate; segments 7 and 8 compactly joined and separated by an oblique suture, segment 8 being longer on ventral than on dorsal surface; sense cones disposed as

follows: 3, 1-1; 4, 1+1-2; 5, 1-1+1; 6, 1-1+1; 7 with one on dorsum near apex; three bristles on ventral surface of segment 7 and six on ventral surface of 8, forming a straight comb. Mouth cone short and broadly rounded at apex, reaching about half across prosternum, the labrum scarcely surpassing labium.

Prothorax about two-thirds as long as head and (inclusive of coxæ) nearly 1.9 times as wide as long; pronotum smooth, with distinct but colorless median thickening; all usual bristles present, the anterior marginals minute and pointed, all others and coxal subequal to or slightly shorter than postoculars, prominently knobbed. Wings of nearly equal width throughout; fore pair without accessory hairs on posterior margin near tip, with the first two of the subbasal bristles similar to the prothoracic ones, and with the third subbasal bristle much longer and pointed. Fore tarsi with a strong curved tooth as long as width of tarsus.

Abdomen of normal form and structure. Tube about 0.55 as long as head and about 2.2 times as long as basal width, which is about 1.8 times the apical, sides straight. Abdominal bristles moderately short, capitate, the longest pair on segment 9 slightly more than half as long as tube; terminal bristles pointed, nearly as long as tube.

Measurements of holotype (♂): Length, 1.51 mm.; head, length 0.264 mm., greatest width 0.167 mm., width at base 0.144 mm.; eyes, length 0.084 mm., width 0.051 mm., interval 0.057 mm.; postocular bristles length 0.036 mm.; prothorax, length 0.175 mm., width (inclusive of coxæ) 0.328 mm.; pterothorax, length 0.288 mm., width 0.305 mm.; abdomen, greatest width 0.276 mm.; tube, length 0.144 mm., width at base 0.065 mm., at apex 0.036 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	42	54	63	63	63	64	44	24
Width (μ)	39	30	25	29	27	27	21	12
Total length of antenna, 0.417 mm.								

Female (macropterous).—Similar in coloration and structure to male. Fore femora about as strongly swollen as in that sex, and fore tarsi about as strongly armed.

Described from three males and one female, all taken by Mr. A. A. Girault by sweeping in a forest at Nelson, North Queensland. The four specimens were taken September 12, 1912; May 29, 1913; January 8, 1914; and May 21, 1914. The female is in very poor condition, and is mounted in balsam under eleven separate coverglasses.

This is a very pretty species. Aside from the important structural characters which have made a new genus necessary for its reception, it may be known by the unusual coloration.

***Trichothrips connexus*, sp. nov.**

Female (macropterous).—Length about 1.5 mm. Color yellowish brown, with segment 3 of antennæ, tips of femora, all tibiæ and tarsi, and tube, yellow; wings of both pairs uniform light brown; hypodermal pigment crimson.

Head as long as wide, broadest and slightly swollen just behind eyes, cheeks converging to base of head and smooth, save for a few minute spines; postocular bristles one-third as long as head, nearly pointed. Eyes one-third as long as head, rounded, somewhat protruding, and about 0.7 as wide as their interval. Anterior ocellus situated in front of anterior margin of eyes and slightly overhanging base of antennæ, the two posterior ones with their hind margins opposite center of eyes. Antennæ nearly two and one-third times as long as head, segment 8 conical and broadly united at base to segment 7; sense cones long and distinct, formula: 3, 1-1; 4, 1-1; 5, 1-1⁺; 6, 1-1⁺; 7 with one on dorsum near apex; segments 1 and 2 and 4-8 nearly concolorous with body, the apical segments slightly paler; segment 3 abruptly light yellow. Mouth cone reaching about two-thirds across prosternum and broadly rounded at tip; labrum not surpassing labium.

Prothorax about 0.84 as long as head and (inclusive of coxæ) about 1.9 times as wide as long; anterior marginal bristles very minute; others distinct, nearly pointed, the three posterior pairs subequal, fully as long as postoculars and about twice as long as anterior laterals; coxal bristle nearly as long as midlateral. Pterothorax distinctly wider than prothorax, sides slightly converging posteriorly. Wings of nearly equal width throughout, fore pair without accessory hairs on posterior margin and with only one subbasal bristle, instead of three. Fore tarsus with a long, slender, nearly straight tooth arising at right angles to the tarsus.

Abdomen of normal shape, distinctly wider than pterothorax. Tube about 0.87 as long as head, about 1.9 times as long as basal width, and more than twice as broad at base as at apex. Bristles long, scarcely pointed, those on the ninth segment about 0.8 as long as the tube; terminal bristles two-thirds the length of tube.

Measurements of holotype (♀): Length 1.48 mm.; head, length 0.192 mm., greatest width 0.192 mm., width at base 0.168 mm.; eyes, length 0.063 mm., width 0.054 mm., interval 0.075 mm.; postocular bristles, length 0.063 mm.; prothorax, length 0.162 mm., width (inclusive of coxæ) 0.307 mm.; pterothorax, length 0.348 mm., width 0.360 mm.; abdomen, greatest width 0.433 mm.; tube, length 0.168 mm., width at base 0.088 mm., at apex 0.039 mm.; fore wings, length 0.960 mm., width at middle 0.096 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	51	60	63	63	65	60	49	36
Width (μ)	41	36	37	35	34	32	26	18

Total length of antenna, 0.447 mm.

Described from a single specimen taken by sweeping in a forest, at Brooklyn, New South Wales, November 10-13, 1914, by Mr. A. A. Girault.

Distinguished at once by the union of the two apical antennal segments and the antennal coloration.

Genus **Teuchothrips**, nov.

(τεῦχος, an implement of war; θρῦψ, a wood worm.)

Head broad, not more than 1.2 times as long as wide, subequal to or much longer than prothorax; vertex either slightly produced and overhanging or with the front margin nearly straight and vertical, the anterior ocellus overhanging; cheeks and occiput distinctly (sometimes deeply) subreticulate, the former arcuate to eyes and base of head. Eyes of moderate size, somewhat shorter and narrower on ventral surface. Antennæ eight-segmented, the last two segments usually compactly united and forming a single mass. Mouth cone rounded at apex, reaching half way or more across prosternum, the labrum not surpassing labium. Prothorax from 0.6 to 0.9 as long as head, bristles usually short and capitate. Fore tarsi with a long, stout, curved tooth. Wings broad, closely fringed, not narrowed at middle. Tube long, usually nearly equal in length to head, sides straight.

Genotype: *Teuchothrips simplicipennis*, sp. nov.

This genus comprises, in addition to the two new species *simplicipennis* and *badiipennis* described below, four species, also from Australia, which were described by the author under the generic name *Liothrips*.¹ These four species should thus be known as *Teuchothrips disjunctus*, *T. connatus*, *T. gracilior*, and *T. brevidens*. The present genus appears to be separable as a natural segregate of the genus *Liothrips*, differing in the short, reticulated head, the broadly rounded mouth cone, the strongly armed fore tarsi, and the frequent union of the two distal antennal segments.

Teuchothrips simplicipennis, sp. nov.

Female (macropterous).—Length about 2 mm. Color dark blackish brown or black, with mid and hind tarsi brown, and distal ends of fore tibiæ, and basal half of segment 3 of antennæ, yellow; wings clouded with brown, the fore wings darker than hind ones and with the scale and the region of the three subbasal bristles much darker; hind wings paler in anterior half, the line of demarkation darkened, especially at base.

Head very slightly wider than long, entire dorsal surface deeply and distinctly reticulate with anastomosing lines; cheeks converging to eyes and base of head, which is about 0.92 of the greatest width; vertex not or only very slightly produced, anterior margin nearly straight and vertical; post-ocular bristles short, about one-third as long as eyes, dark in color, capitate. Eyes about 0.4 as long as head, not protruding, two-thirds as wide as their interval; ventral length about five-sevenths of dorsal, ventral width a little more than half of ventral interval. Anterior ocellus slightly overhanging, directed forward. Antennæ of normal structure, about 2.19 times as long as head, segments 7 and 8 compactly united to form a single mass, 8 short, about 1.8 times as long as greatest basal width; sense cones short and inconspicuous, formula: 3, 0-1; 4, 1-2+1; 5, 1-1+1; 6, 1-1+1; 7 with one on dorsum near apex; segments 1, 2 and 4-8 dark blackish brown, with apex

¹Memoirs of the Queensland Museum, Vol. VI, pp. 134-138; Dec. 19, 1918.

of 2 and pedicels of 4-6 slightly paler, 3 yellow in basal half, remainder brown. Mouth cone narrowly rounded at tip, reaching three-fourths across prosternum, labrum not surpassing labium.

Prothorax about 0.9 as long as head and (inclusive of coxæ) not quite 1.9 times as wide as long; pronotum smooth at middle, margins with strong anastomosing lines; median thickening short; all usual bristles present, the anterior marginals minute and pointed, others short, stout, capitate, pale in color, and from one-third to one-half as long as eyes. Wings broad, the fore pair without accessory hairs on posterior margin and with the three subbasal bristles short, pale, and capitate. Fore tarsus with a strong curved tooth longer than half the width of tarsus.

Abdomen of normal form and structure. Tube equal in length to head and 2.3 times as long as the basal width, which is 2.3 times the apical, sides straight. Abdominal bristles rather short, capitate, those on segment 9 about half as long as tube; terminal bristles three-fourths as long as tube.

Measurements of holotype (♀): Length 2.00 mm.; head, length 0.236 mm., greatest width 0.240 mm., least width (near base) 0.222 mm.; eyes, length 0.096 mm., width 0.063 mm., interval 0.090 mm.; postocular bristles, length 0.030 mm.; prothorax, length 0.211 mm., width (inclusive of coxæ) 0.396 mm.; pterothorax, length 0.396 mm., width 0.499 mm.; abdomen, greatest width 0.600 mm.; tube, length 0.236 mm.; width at base 0.102 mm., at apex 0.044 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	51	66	80	75	73	68	70	33
Width (μ)	41	37	33	38	36	35	31	18
Total length of antenna, 0.516 mm.								

Described from two females taken by sweeping in forest, at Brooklyn, New South Wales, November 1 and 9, 1914, by A. A. Girault.

Easily known by the brown wings and the absence of interlocated hairs on the posterior margin of the fore wings.

***Teuchothrips badiipennis*, sp. nov.**

Female (macropterous).—Length about 1.7 mm. Color dark blackish brown or black, with mid and hind tibiae brown, and distal ends of fore tibiae yellow; antennæ with segments 1, 2, 7 and 8 concolorous with head, 2 yellow at apex, 3-6 lemon yellow, 4 infusate in apical third, 5 in apical half, and 6 in apical three-fifths, this infuscation darkest on sides of segments; wings brown, the fore wings darker than hind ones and slightly paler at apex and in the region of the three subbasal bristles; hind wings paler in anterior half and with median vein darker.

Head about 1.2 times as long as wide, entire dorsal surface distinctly reticulate with anastomosing lines; cheeks gently arched, slightly converging to eyes and base of head; vertex not produced nor overhanging, the anterior margin straight and vertical; postocular bristles capitate, about 0.7 as long as eyes, almost colorless. Eyes a little more than one-third as long as head, not protruding, five-sixths as wide as their interval; ventral

length and width distinctly less than dorsal. Anterior ocellus slightly overhanging, directed forward. Antennæ about 1.75 times as long as head, segments 5 and 6 obliquely truncate on outer surface at apex, causing the antennæ to curve outward; segments 7 and 8 compactly united to form a single mass, 8 short, about 1.7 times as long as greatest basal width; sense cones short and inconspicuous, formula: 3, 0-1; 4, 1-1+1; 5, 1-1+1; 6, 1-1+1; 7 with one on dorsum near apex. Mouth cone broadly rounded at apex, reaching three-fourths across prosternum, labrum not surpassing labium.

Prothorax three-fourths as long as head and (inclusive of coxæ) about twice as wide as long; pronotum smooth at middle, margins with faint anastomosing lines; median thickening almost wanting; all usual bristles present, the anterior marginals minute and pointed, others capitate and light brown in color, shorter than postoculars, the outer pair at posterior angles longest. Wings broad, the fore pair with about eleven accessory hairs on posterior margin and with the three subbasal bristles short, pale, capitate, and subequal in length. Fore tarsus with a stout curved tooth as long as half the width of tarsus.

Abdomen of normal form and structure. Tube about 0.8 the length of head and more than twice as long as the basal width, which is somewhat more than twice the apical, sides straight. Abdominal bristles rather long and capitate, those on segment 9 two-thirds as long as tube; terminal bristles equal in length to tube.

Measurements of holotype (♀): Length 1.70 mm.; head, length 0.244 mm., greatest width 0.208 mm., least width (near base) 0.196 mm.; eyes, length 0.087 mm., width 0.060 mm., interval 0.072 mm.; postocular bristles, length 0.060 mm.; prothorax, length 0.185 mm., width (inclusive of coxæ) 0.366 mm.; pterothorax, length 0.384 mm., width 0.456 mm.; abdomen, greatest width 0.508 mm.; tube, length 0.204 mm., width at base 0.096 mm., at apex 0.045 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	48	62	60	60	62	59	51	30
Width (μ)	42	35	32	36	33	33	27	18
Total length of antenna, 0.432 mm.								

Described from three females taken by sweeping in forest and in a yard at Brooklyn, New South Wales, November 1 and 7-18, 1914, by A. A. Girault.

Separable by the brown wings, the yellow bases of antennal segments 3-6, and the presence of accessory hairs on the posterior margin of the fore wings.

Cryptothrips acanthus, sp. nov.

Female (macropterous).—Length about 2.3 mm. Color dark blackish brown, with tarsi, fore tibiæ, and articulations of legs paler; abdomen nearly black; antennæ concolorous with body, except segment 3 which is abruptly brownish yellow and more darkly clouded with brown in apical

Described from one female taken by A. A. Girault at Nelson, North Queensland, April 2, 1914, by sweeping in jungle.

Readily known by the long tube and armed fore tarsi.

***Cryptothrips claripennis*, sp. nov.**

Female (macropterous).—Length about 2 mm. Color dark blackish brown, with tarsi, fore tibiae, and articulations of legs paler; antennal segments 3–5 and apex of segment 2, yellow, 3 faintly darkened with brown at apex, 4 and 5 brown in apical third and three-fifths, respectively, the remainder of antennae concolorous with body; wings clear.

Head about 1.3 times as long as greatest width, which is about midway between eyes and base; cheeks evenly arched, converging more rapidly posteriorly, where the head is about 0.85 of the greatest width, faintly transversely striate, and with a few minute barely-visible spines; vertex roundly swollen and slightly produced, though scarcely overhanging, with a pair of pointed bristles half as long as postoculars situated between posterior ocelli; postocular bristles scarcely pointed, nearly half as long as head. Anterior ocellus overhanging and directed forward, situated far in advance of anterior margin of eyes, which is on a line with anterior margin of the widely separated posterior ocelli. Eyes about 0.3 the length of head and two-thirds as wide as their interval, not protruding. Antennae formed as usual in the genus, about twice as long as head, the last two segments scarcely closely united; segments 3 and 4 each with a large sense cone at middle of ventral apical surface, 3 with an additional one on outer surface, 4 with three additional ones on inner, outer, and upper surfaces, respectively; 5 with a large sense cone on either side of apex and a small one on dorsum; 6 with a large sense cone on inner surface of apex and a small one on dorsum; 7 with a large one on dorsum. Mouth cone semicircularly rounded at apex and reaching three-fourths across prosternum, labrum not surpassing labium.

Prothorax along median dorsal line about half the length of head, with distinct median thickening, surface smooth; all usual bristles present, scarcely pointed, the two pairs near posterior angles longest but scarcely equal in length to postoculars, anterior marginals two-thirds as long as anterior angulars and one-fourth as long as postoculars, coxal bristles equal to anterior angulars. Fore wings broad, colorless, and with about fourteen accessory hairs. Fore tarsi unarmed.

Abdomen broad and heavy. Tube equal in length to head and three times as long as basal width, which is more than twice the apical, sides nearly straight. Bristles very long and pointed, yellow, those on segment 9 slightly shorter than tube and slightly longer than terminal bristles.

Measurements of holotype: (♀): Length 1.94 mm.; head, length 0.294 mm., greatest width 0.228 mm., least width (at base) 0.194 mm.; eyes, length 0.087 mm., width 0.063 mm., interval 0.093 mm.; postocular bristles, length 0.120 mm.; prothorax, length 0.142 mm., width (inclusive of coxae) 0.342 mm.; pterothorax, length 0.360 mm., width 0.396 mm.; abdomen,

greatest width 0.540 mm.; tube, length 0.294 mm., width at base 0.099 mm., at apex 0.046 mm.

Antennal segments:	1	2	3	4	5	6	7	8
Length (μ)	60	72	102	99	84	69	54	45
Width (μ)	50	36	35	37	34	32	24	16
Total length of antenna, 0.585 mm.								

Described from one female taken on a window at Nelson, North Queensland, in July, by A. A. Girault.

The long tube, the coloration of the antennæ and wings, and the prominent interocellar bristles readily distinguish this species from its Australian congeners.

